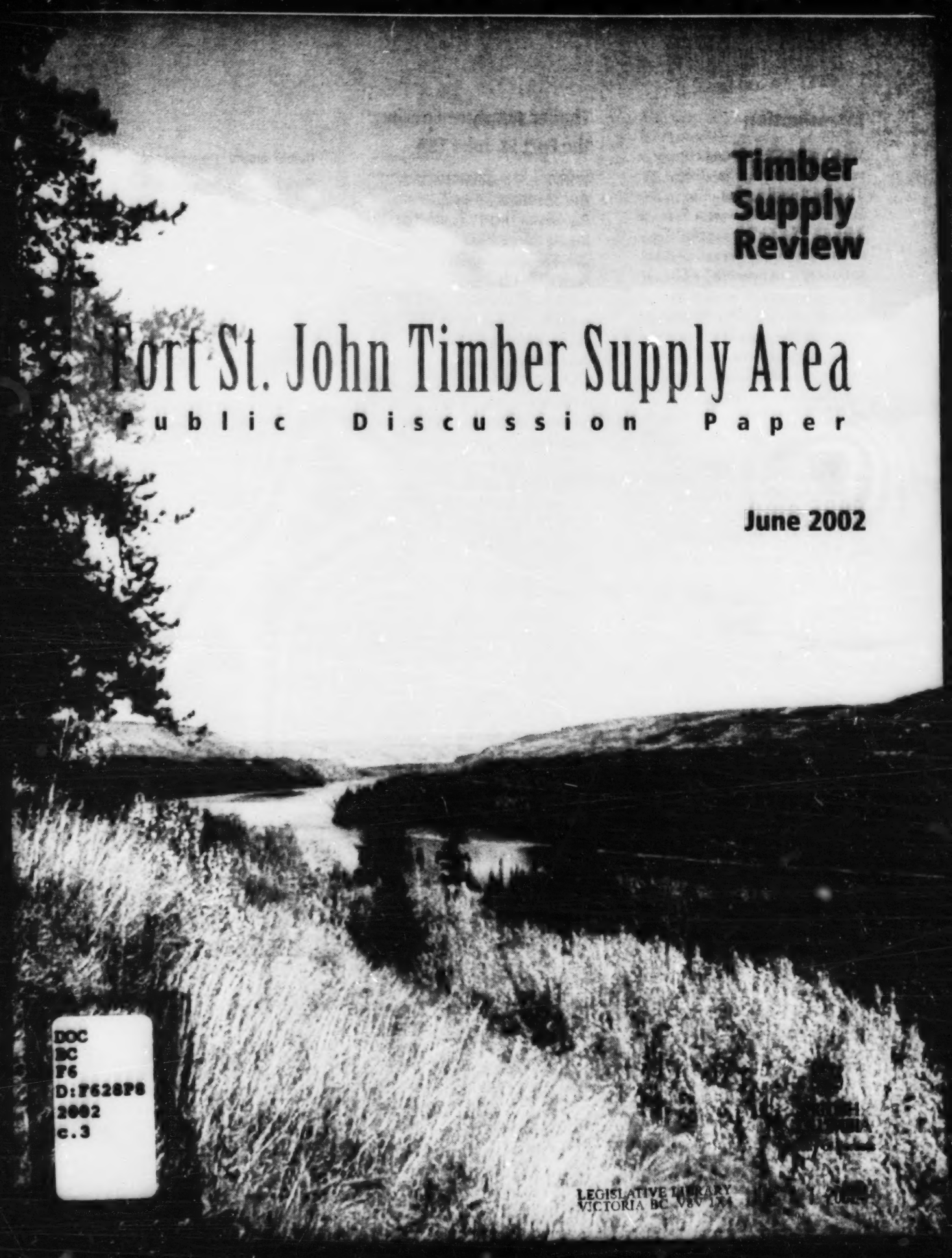

Timber Supply Review

Fort St. John Timber Supply Area

Public Discussion Paper

June 2002

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Introduction

Welcome to the timber supply review in the Fort St. John Timber Supply Area. The British Columbia Forest Service reviews the timber supply* for all timber supply areas* (TSAs) and tree farm licences* (TFLs) in the province at least once every five years. This review examines the impacts of current forest management practices on the timber supply, economy, environment and social conditions of the local area and the province. Based on this review, the chief forester will determine the allowable annual cut* (AAC) for the Fort St. John TSA.

The timber supply review considers:

Economic, environmental and social factors, information about current forest management practices, and public input.

The timber supply review produces:

- A new AAC for the next five years
- A list of the information to be improved for future timber supply forecasts

Timber supply review in the Fort St. John TSA

With the release of the *2002 Fort St. John TSA Analysis Report*, the British Columbia Forest Service has completed the second step in its Timber Supply Review (see steps below). The *Analysis Report* contains a timber supply analysis with harvest level forecasts and a socio-economic analysis. This discussion paper summarizes the report, provides an overview of the timber supply review process and encourages British Columbians to provide comments during the 60-day public review period. **Public comments will be accepted until Aug. 26, 2002.**

Before setting a new AAC, the chief forester will review all relevant reports and public input. The chief forester's determination will be outlined in a rationale statement that, along with the summary of public input, will be available to the public upon release. Following the release of the AAC determination by the chief forester, the minister of forests will apportion the AAC to the various licences and programs.

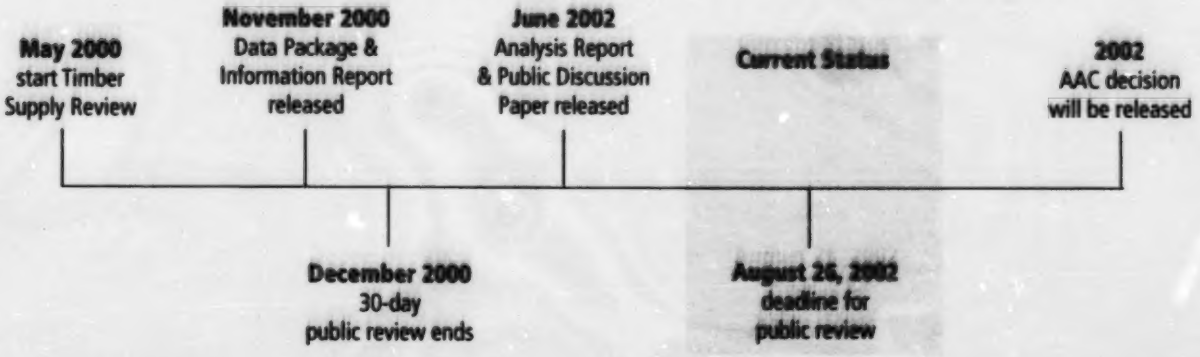
* **Timber supply** - the amount of timber that is forecast to be available for harvesting over a specified time period, under a particular management regime.

* **TSA** - an integrated resource management unit established in accordance with Section 7 of the Forest Act.

* **TFL** - provides rights to harvest timber, and outlines responsibilities for forest management, in a particular area.

* **AAC** – the rate of timber harvest permitted each year from a specified area.

Figure 1. Steps in the timber supply review process for the Fort St. John TSA.



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Description of the TSA

The Fort St. John TSA is located in northeastern British Columbia, and is one of six TSAs in the Prince George Forest Region. This TSA is bounded by the Alberta border to the east, the height of the Rocky Mountains to the west, the Fort Nelson TSA to the north and the Peace River to the south. The TSA covers about 4.7 million hectares, and is administered by the Fort St. John Forest District office.

The City of Fort St. John is the largest community in the TSA, with about 60 per cent of the TSA population. The other major population centre is Taylor. First Nations communities in the TSA include settlements at Halfway River, Blueberry River, Doig River and Kahntah. The population of the Fort St. John TSA was estimated to be about 28,250 in 2001, about a 6.1 per cent increase since 1996.

First Nations

Eight First Nations in the Fort St. John TSA are signatories to Treaty 8. Three of these First Nations – Blueberry River, Doig River and Halfway River First Nations – have reserve lands and traditional use territory in the TSA. The remaining bands – Prophet River, West Moberly, Dene Tha, Fort Nelson and Saulteau – have traditional-use territories but no reserve lands. The Kahntah community in the northeastern part of the Fort St. John TSA is associated with the Fort Nelson First Nation in the Fort Nelson TSA.

Information from cultural heritage inventory studies, archaeological impact assessments and traditional-use studies that have been completed will be considered in the upcoming allowable annual cut determination.

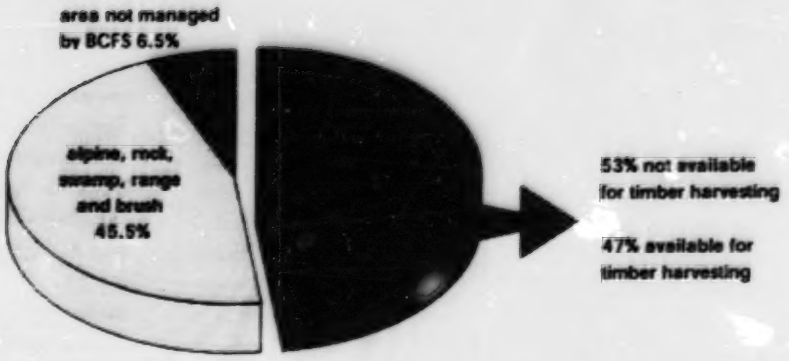

area not managed by BCFS 6.5%
alpine, rock, swamp, range and brush 45.5%
53% not available for timber harvesting
47% available for timber harvesting

Figure 2. Breakdown of land base for Fort St. John TSA.

The natural resources

The forests of the Fort St. John TSA provide a wide range of forest land resources and values, including forest products, recreation and tourism amenities, guide-outfitting, trapping, ranching, a variety of fishery and wildlife habitats, and oil and gas exploration and development activities. Commercial livestock grazing is a widespread use on public forest land.

As Figure 2 shows, about 48 per cent of the Fort St. John TSA land base is considered productive Crown forest land managed by the British Columbia Forest Service (approximately 2.24 million hectares). Currently, about 47 per cent of this is considered available for harvesting (23 per cent of the total TSA land base).

Environmental values

Current forest management follows the standards set out by the Forest Practices Code. These standards are designed to maintain a range of biodiversity and wildlife values. The Forest Practices Code also outlines a process for identifying species at risk that require special management. Currently, a number of species identified as at risk may be found in the Fort St. John TSA, including the northern goshawk, trumpeter swan, fisher, grizzly bear and bull trout.

The four licensees in the TSA – Canadian Forest Products Ltd., Louisiana Pacific Canada Ltd., Slocan Forest Products Ltd. and the Ministry of Forests Small Business Forest Enterprise Program – have jointly entered into a results-based pilot project. The pilot's emphasis is to shift from prescriptive management under the Code to results-based management. The core of the pilot project is a new document called the Sustainable Forest

Management Plan, which is expected to be completed by 2003.

In the Fort St. John TSA, about 53 per cent of the productive Crown-owned forest land is not considered available for timber harvesting and will provide for many environmental values. Forested area both inside and outside the timber harvesting land base will help maintain critical forest habitats for many species. Forest cover requirements for biodiversity, scenic areas, recreation features, stream, lake and wetland management, and protection of unstable terrain were included in the analysis.

Land-use planning

In October 1997, the Fort St. John Land and Resource Management Plan (LRMP) for Crown land in the Fort St. John TSA, was approved by government. The plan, which guides resource management in the TSA, recommended 11 new protected areas – eight of which have been established. Land-use planning decisions regarding forest practices that have been implemented are reflected in this timber supply analysis, as are newly designated protected areas and parks. An important result of the Fort St. John LRMP was the designation of the Muskwa-Kechika Management Area, which comprises protected areas and special management areas. Management objectives for this area ensure that environmental values are maintained while allowing resource development.

Current allowable annual cut

Following the last timber supply review, the chief forester set the allowable annual cut for the Fort St. John TSA at 2.015 million cubic metres effective Dec. 31, 1996, a 12-per-cent increase from the previous level. The AAC was partitioned into 1.1 million cubic metres for harvesting within predominantly coniferous stands and 915,000 cubic metres for harvesting within predominantly deciduous stands.

Socio-economic profile

Regional economy

The Fort St. John TSA is one of the most economically diverse regions in the province. The oil and gas sector continues to be the leading employer in the TSA, supporting about 26 per cent of the labour force (see Figure 3). The public sector and the travel and tourism industry are the second and third largest employers, respectively. Forestry, agriculture and construction each account for nine per cent of the labour force in the TSA. (Labour force data is from the 1996 census. Data from the 2001 census is not available until 2003.)

From 1999 to 2001, an average of 998,126 cubic metres per year of timber was harvested from the Fort St. John TSA –

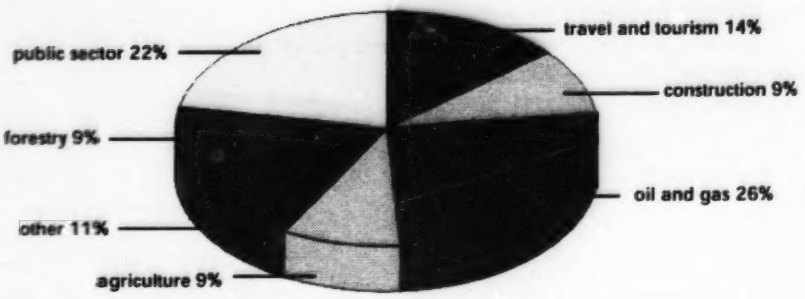


Figure 3. Experienced labour force by sector (1996), Fort St. John TSA.

about half of the current AAC. The difference between the actual harvest level and the AAC is primarily due to the deciduous harvest, which between 1999 and 2001 averaged 139,000 cubic metres per year. The majority of the deciduous harvest is intended to supply an oriented strandboard plant proposed for the TSA. Plant construction is expected to begin in 2003, after which it is expected that the deciduous harvest will increase.

Table 1 illustrates the potential contribution of the forest industry associated with the Fort St. John TSA timber harvest to both the regional and provincial economies. Figures in this table are based on the average 1999-2001 annual harvest of 998,126 cubic metres.

Timber supply forecasts

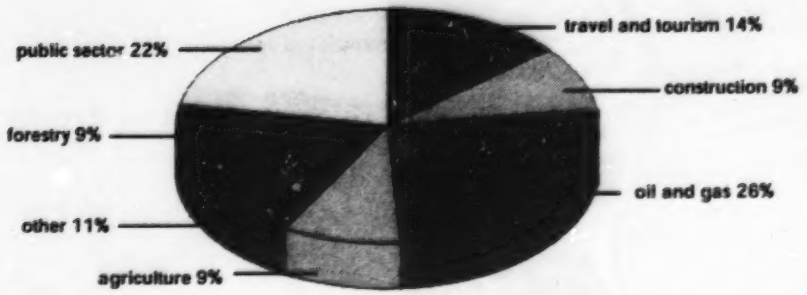
A timber supply computer model was used to project several possible timber supply forecasts for the next 250 years. Using the best available information, the base case forecast illustrates the effect of current forest management practices on timber supply. The base case forecast is not a recommendation for an AAC, but rather it is one of many sources of information the chief forester will consider when setting the AAC.

As Figure 4 shows, the base case forecast for the Fort St. John TSA indicates an initial harvest level of 2.719 million cubic metres per year, about 35 per cent higher than the current

Forest industry economic contribution

	TSA	Provincial
Direct employment (person years)	569	669
Total employment (person years)	888	1,437
Total employment income ($1999 millions per year)	37.9	57.9
Provincial government revenues ($1999 millions per year)	N/A	37.2

Table 1. Local and provincial economic information associated with the average 1999-2001 annual harvest.



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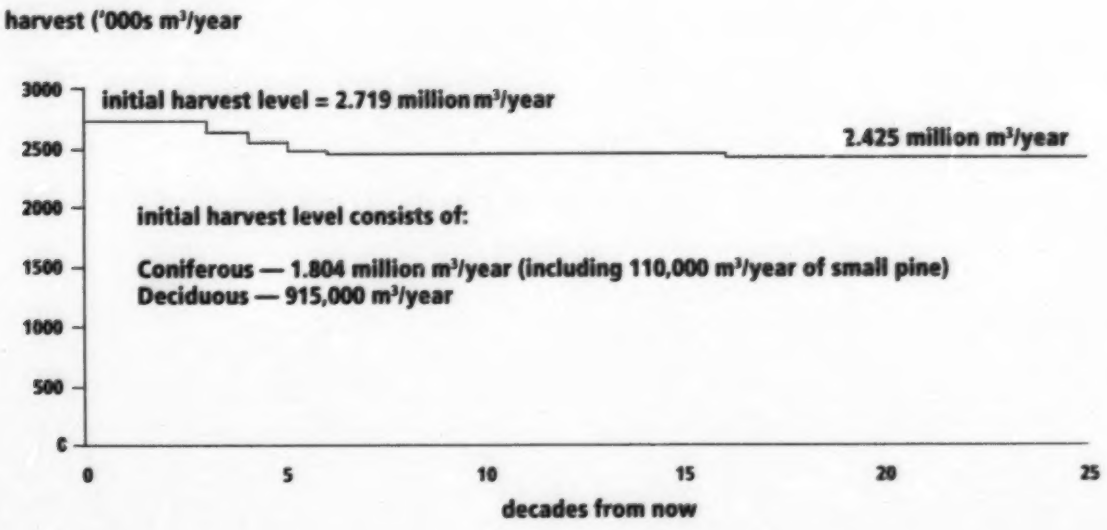
AAC. The base case forecast consists of two components: a deciduous harvest of 915,000 cubic metres and a coniferous harvest of 1.804 million cubic metres per year (including a small pine harvest of 110,000 cubic metres per year). The coniferous harvest level in the base case forecast is 704,000 cubic metres per year higher than the current AAC, while the deciduous harvest level is the same as the current AAC. The coniferous harvest level is projected to remain essentially unchanged for the long term. The deciduous harvest level is projected to decline after 30 years by about 10 per cent per decade until it eventually reaches a long-term harvest level of 632,000 cubic metres per year.

The timber supply forecast is similar to the forecast in the 1995 analysis. However, the AAC was not set at the base case level because of a number of uncertainties, including the potential impact of new parks and the Fort St. John LRMP. Since the completion of the 1995 timber supply analysis, several changes have occurred in the Fort St. John TSA that affect timber supply forecasts. The timber harvesting land base is 11 per cent smaller, mostly due to new parks and protected areas, and the exclusion of areas of low productivity. In addition, the implementation of the Forest Practices Code – including further reductions for wildlife tree patches and streams, lakes and wetlands – has affected timber availability.

These changes have been offset by changes in the way the timber supply analysis was modelled, and the inclusion of some areas previously considered economically or physically inoperable.

Figure 4. Base case timber supply forecast – Fort St. John TSA, 2002.



Sensitivity analyses: examining uncertainty

Because forests are complex and constantly changing, timber supply analysts assess how the timber supply might be affected by uncertainties in inventory information and management practices. These uncertainties are generally examined through what are called sensitivity analyses, which the chief forester will consider in determining an AAC. The sensitivity analyses are useful for assessing how uncertainties and risks, or any changes in information, might affect timber supply.

In the Fort St. John TSA, a number of sensitivity analyses were conducted to examine the stability of the timber supply in light of uncertainties. Three key sensitivity analyses are described below. For a complete listing of sensitivity analyses, please refer to the *2002 Fort St. John TSA Analysis Report*.

Uncertainty about harvesting mixed wood species

Stands that are not predominantly coniferous or deciduous are considered "mixed wood". Mixed wood stands make up about 29 per cent of the coniferous timber harvesting land base in the Fort St. John TSA. If deciduous trees are not harvested within the coniferous timber harvesting land base, the coniferous harvest level is projected to decline by nine per cent to 1.542 million cubic metres per year, resulting in a six-per-cent decrease in the initial harvest forecast.

Mixed wood stands also comprise about 44 per cent of the deciduous timber harvesting land base. If coniferous trees are not harvested within the deciduous timber harvesting land base, the initial harvest forecast can only be maintained for one decade instead of three decades in the base case forecast.

Uncertainty about the size of the timber harvesting land base

Determining the size of the timber harvesting land base – after taking into account environmental values – involves complex considerations and projections about the future. There is no indication the timber harvesting land base in the Fort St. John TSA has been over- or underestimated. Nevertheless, there is some uncertainty as a result of factors like fluctuations in timber prices (which may make stands less economical to harvest) and changes in harvesting and milling technology.

If the timber harvesting land base is decreased by 10 per cent, the initial harvest level decreases by about six per cent to 2.568 million cubic metres per year.

Uncertainty about existing stand volumes

Timber volume estimates for existing unmanaged stands are subject to uncertainties in the forest inventory used to estimate timber volumes. A 1995 inventory audit indicated that the average mature timber volumes for the entire TSA were 23 per cent lower than previously estimated. However, a recent review of the audit indicates that the average mature timber volumes are about eight per cent lower than previously estimated.

Given the uncertainties in the existing stand volumes, sensitivity analyses were carried out in which stand volumes were increased and decreased by 10 per cent. If existing stand volumes are increased by 10 per cent, the initial coniferous harvest forecast remains unchanged, while the initial deciduous harvest level could be maintained for four decades instead of three. If existing stand volumes are decreased by 10 per cent, the initial coniferous harvest forecast would decline by about seven per cent, and the initial harvest level for deciduous stands could only be maintained for one decade.

Implications of changes in the AAC

Community Implications

The implication of changes in the AAC for local communities is an important consideration in the Timber Supply Review. The forest industry in the Fort St. John TSA is a significant source of employment and income for local residents. An increase in the timber supply could provide additional economic opportunities.

Compared to the 1999-2001 average annual harvest, an initial harvest level of 2.719 million cubic metres, if fully harvested and processed, would result in an additional 980 person-years of direct forestry employment and 225 person-years of indirect and induced employment within the TSA. The additional employment income associated with this direct, indirect and induced employment is projected to be about $100 million provincewide. The provincial government could collect an additional $64 million per year, including $40 million more in stumpage payments.

Your input is needed

Public input is a vital part of establishing the AAC. Feedback is welcomed on any aspect of this discussion paper, the *2002 Fort St. John TSA Analysis Report* and other issues related to the timber supply in the Fort St. John TSA. Forest Service staff would be pleased to answer questions to help you prepare your response. Please send your comments to the forest district manager at the address below. **Your comments will be accepted until Aug. 26, 2002.**

You may identify yourself on the response if you wish. If you do, you are reminded that responses will be subject to the *Freedom of Information and Protection of Privacy Act* and may be made public. If the responses are made public, personal identifiers will be removed before the responses are released.

A summary of public comments will be attached to the AAC rationale and will be available from the district office when the chief forester's AAC determination is announced.

For more information contact Janice Edwards at the Fort St. John Forest District. Send your comments by electronic mail to: Janice.Edwards@gems7.gov.bc.ca

Submit your comments by regular mail to:
District Manager
British Columbia Forest Service
Fort St. John Forest District
8808-72 Street
Fort St. John, BC V1J 6M2
Phone: (250) 787-5600
Fax: (250) 787-5610

Regional Manager
B.C. Forest Service
1011 4th Avenue
Prince George, BC V2L 3H9
Phone: (250) 565-6100
Fax: (250) 565-6671

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Background Information Regarding TSR

The Chief Forester's Responsibility

Determining the allowable annual cuts (AACs) for public forest lands in British Columbia is the responsibility of the province's chief forester. In this lengthy and complex process, the chief forester considers technical reports, analyses and public input, as well as government's social and economic objectives.

This responsibility is required by legislation in the *Forest Act*, Section 8. It states that the chief forester shall specifically consider the following factors:

1. The rate of timber production that may be sustained from the area, taking into account:
   - the composition of the forest and its expected rate of growth
   - the time that it will take the forest to become re-established
   - silviculture treatments, including reforestation
   - standards of timber utilization
   - constraints on the amount of timber that may be produced due to use of the forest for other purposes.
2. The short- and long-term implications to the province of alternative rates of timber harvesting from the area.
3. The nature, production capabilities and timber requirements of established and proposed processing facilities.
4. The economic and social objectives of the Crown for the area, region and province—as expressed by the minister of forests.
5. Abnormal insect or disease infestations, and major salvage programs planned for the timber on the area.

Some of these factors can be measured and analyzed – others cannot. Ultimately, the chief forester's determination is an independent professional judgment based on the best available information. By law, the chief forester is independent of the political process, and is not directed by the minister of forests when determining AACs. In these determinations, the chief forester considers relevant information from all sources.